

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IX 75 Hawthorne Street San Francisco, CA 94105-3901

SEP 2 7 2005

CERTIFIED MAIL NO. 7004 1160 0004 3168 6043 RETURN RECEIPT REQUESTED

In Reply:

AIR-5

Refer To:

Docket No. R9-05-21

Mr. Gilberto Perez Mr. Andrew M. Miller Managers Cemex California Cement LLC 840 Gessner Ste 1400 Houston, TX 77024

Re:

Finding and Notice of Violation

Cemex California Cement LLC

Victorville, California

Dear Mr. Perez and Mr. Miller:

The United States Environmental Protection Agency ("U.S. EPA") is issuing the enclosed Finding and Notice of Violation ("NOV") to Cemex California Cement LLC ("Cemex") under Section 113(a)(1) and (a)(3) of the Clean Air Act, 42 U.S.C. 7413 (a) (1) and (a) (3). We find that Cemex has been and continues to be in violation of the Prevention of Significant Deterioration requirements in Part C of the Clean Air Act, 42 U.S.C. 7470-7479 and 42 U.S.C. 7491-7492, Sections 502 and 503 of the Clean Air Act, 42 U.S.C. 7661a-7661b, at Cemex's Victorville, California facility.

Section 113 of the Clean Air Act gives us several enforcement options. These options include issuing an administrative compliance order, issuing an administrative penalty order, and bringing a judicial civil or criminal action. We are offering you an opportunity to confer with us about the violations alleged in the NOV. The conference will give you an opportunity to present information on the specific findings of violation, any efforts you have taken to comply, and the steps you will take to prevent future violations.

If you accept this opportunity, please plan for your facility's technical and management personnel to attend the conference to discuss compliance measures and commitments. You may also have an attorney represent you at this conference if you choose, as a U.S. EPA attorney will be present.

Cemex Page 2

The contacts in this matter are Dinesh Senghani, Environmental Engineer, and Ivan Lieben, Attorney Advisor. You may call Mr. Senghani at (415) 972-3981 or have your attorney call Mr. Lieben at (415) 972-3914 to request a conference. You should make the request as soon as possible, but no later than 10 calender days after you receive this letter. We should hold any conference within 30 calender days of your receipt of this letter.

Sincerely,

Deborah Jordan, Director

Air Division

cc: Mr. Charles Fryxell, APCO, MDAQMD

Mr. James Ryden, Chief, Enforcement Division, CARB

Mr. Don Kelly

Plant Manager

Cemex California Cement LLC

1688 North "E" Street Victorville, CA 92394



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REGION IX

75 Hawthorne Street San Francisco, CA 94105-3901

SEP 2 7 2005

In Reply:

AIR-5

Refer To:

Docket No. R9-05-21

Mr. James Ryden Chief, Enforcement Division California Air Resources Board P.O. Box 2815 Sacramento, CA 95812

Re:

Cemex California Cement LLC

Dear Mr. Ryden:

Enclosed for your information is a copy of a Finding and Notice of Violation ("NOV") issued by the United States Environmental Protection Agency ("EPA") to Cemex California Cement LLC ("Cemex") concerning the operation of its cement plant located near Victorville, California (the "Facility"). The NOV has been issued because the Facility has been in violation of the Clean Air Act's Prevention of Significant Deterioration ("PSD") regulations.

Section 113(a)(1) of the Act, as amended (42 U.S.C. § 7413(a)(1)), provides in part:

Whenever, on the basis of any information available to the Administrator, the Administrator finds that any person has violated or is in violation of any requirement or prohibition of an applicable implementation plan or permit, the Administrator shall notify the person and the State in which the plan applies of such finding.

The Clean Air Act further provides that after 30 days from the date of issuance of this NOV, EPA may determine if any further action will be taken pursuant to Section 113 of the Act. 42 U.S.C. § 7413(a)(1).

Mr. Ryden Page 2

The NOV informs the Facility that a conference on the matter may be arranged by making a request to this office within 10 working days after receipt of the NOV. If you have any questions concerning this NOV, please contact Dinesh Senghani, Enforcement Office, at (415) 972-3981, or have your attorney contact Ivan Lieben, Office of Regional Counsel, at (415) 972-3914.

Sincerely,

Deborah Jordan

Director, Air Division

Enclosures



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IX 75 Hawthorne Street San Francisco, CA 94105-3901

SEP 2 7 2005

In Reply:

AIR-5

Refer To:

Docket No. R9-05-21

Mr. Charles Fryxell Air Pollution Control Officer Mojave Desert Air Quality Management District 14306 Park Avenue Victorville, CA 92392

Re:

Cemex California Cement LLC

Dear Mr. Fryxell:

Enclosed for your information is a copy of a Finding and Notice of Violation ("NOV") issued by the United States Environmental Protection Agency ("EPA") to Cemex California Cement LLC ("Cemex") concerning the operation of its cement plant located near Victorville, California (the "Facility"). The NOV has been issued because the Facility has been in violation of the Clean Air Act's Prevention of Significant Deterioration ("PSD") regulations.

Section 113(a)(1) of the Act, as amended (42 U.S.C. § 7413(a)(1)), provides in part:

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The Clean Air Act further provides that after 30 days from the date of issuance of this NOV, EPA may determine if any further action will be taken pursuant to Section 113 of the Act. 42 U.S.C. § 7413(a)(1).

Mr. Fryxell Page 2

The NOV informs the Facility that a conference on the matter may be arranged by making a request to this office within 10 working days after receipt of the NOV. If you have any questions concerning this NOV, please contact Dinesh Senghani, Enforcement Office, at (415) 972-3981, or have your attorney contact Ivan Lieben, Office of Regional Counsel, at (415) 972-3914.

Sincerely,

Deborah Jordan

Director, Air Division

Enclosures

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION 9

In the Matter of:)	
Cemex California Cement LLC Victorville, California)	Docket No. R9-05-21
Proceeding Under Section 113(a), Clean Air Act,)	FINDING AND NOTICE OF VIOLATION
as Amended)	

FINDING AND NOTICE OF VIOLATION

This Finding and Notice of Violation ("NOV") is issued to Cemex California Cement LLC ("Cemex") for violations of the Clean Air Act ("CAA" or the "Act"), as amended, at its portland cement manufacturing facility located in Victorville, California (the "Facility"). This NOV is issued pursuant to Section 113(a)(1) of the Act, 42 U.S.C. § 7413(a)(1). Section 113(a)(1) of the Act requires the Administrator of the United States Environmental Protection Agency ("EPA") to notify any person in violation of an applicable state implementation plan ("SIP") or a permit when the Administrator finds that person to be in such violation. Prevention of Significant Deterioration ("PSD") regulations found at 40 C.F.R. Part 52 clarify that failure to comply with the PSD provisions renders a source subject to enforcement under section 113 of the Act for being in violation of any PSD requirement incorporated into a SIP. See 40 C.F.R. § 52.23. The authority to issue this NOV has been delegated to the Regional Administrator of EPA, Region IX, and redelegated to the Director

of the Air Division ("Director") of EPA, Region IX.

SUMMARY

The Facility is a portland cement manufacturing plant along with an adjacent quarry to mine raw products such as limestone for use in the cement production. The Facility is divided into two distinct parts, the Black Mountain Quarry Plant ("Quarry Plant") located in Apple Valley, California, and the River Plant located in Victorville, California. As the River and Quarry Plants are both owned by Cemex and connected by a dedicated rail line also owned by Cemex, they are considered one source for Title V and New Source Review purposes.

The River Plant was originally constructed in 1915 and the Quarry Plant in 1965, and both have undergone numerous changes and upgrades since their dates of original construction. This NOV concerns two physical modifications that occurred in 1997 and 2001 (the "1997 Modification" and "2001 Modification", respectively) where EPA Region IX believes that Cemex should have obtained PSD permits and applied best available control technology ("BACT") before commencing construction of these modifications or operating the upgraded Facility. In the 1997 Modification, Cemex upgraded one of its large clinker kilns at its Quarry Plant, Kiln Q2, to greatly increase production capacity. In the 2001 Modification, Cemex constructed a new Kiln Q3 and shutdown Kilns Q1, R8 and R9, once again greatly

increasing capacity.

STATUTORY AND REGULATORY AUTHORITY

National Ambient Air Quality Standards

- The Administrator of EPA, pursuant to authority under Section 109 of the Act, 42 U.S.C. § 7409, promulgated the national ambient air quality standards ("NAAQS") for certain criteria pollutants relevant to this NOV, including sulfur dioxides ("SO2"); carbon monoxide ("CO"); and nitrogen dioxide ("NO2"). 40 C.F.R. §§ 50.4, 50.5, 50.7, 50.8, 50.9, and 50.10.
- Pursuant to Section 107(d) of the Act, 42 U.S.C. § 7407(d), the Administrator promulgated lists of attainment status designations for each air quality control region ("AQCR") in every state. These lists identify the attainment status of each AQCR for each of the criteria pollutants. The attainment status designations for the California AQCRs are listed at 40 C.F.R. § 81.305.
- 3. The Facility is located in San Bernadino County. The AQCR for the CO, SO2, and NO2 NAAQS that includes the portion of San Bernadino County where the Facility is located was designated as attainment/unclassifiable at all times relevant to this NOV for those pollutants.¹ 40 C.F.R.

The area of the AQCR for each pollutant is different and they are not defined with any specificity in this NOV. 40 C.F.R. § 81.305 defines the AQCRs with specificity, however.

§ 81.305.

Prevention of Significant Deterioration

- 4. Section 110(a)(2)(C) of the Act, 42 U.S.C. § 7410(a)(2)(C), requires that each SIP include a PSD permit program as provided in Part C of Title I of the Act, 42 U.S.C.
 §§ 7470-7491.
- 5. On June 19, 1978, pursuant to Sections 160 through 169 of the Act, 42 U.S.C. §§ 7470-7479, EPA promulgated PSD regulations at 40 C.F.R. § 52.21² (43 Fed. Reg. 26,402).
- 6. The provisions of 40 C.F.R. §§ 52.21(b) through (w) were incorporated by reference and made part of the SIP for the State of California at 40 C.F.R. § 52.270, 50 Fed. Reg. 25419 (June 19, 1985), as amended at 50 Fed. Reg. 30,943 (July 31, 1985).
- 7. EPA has never delegated its authority to implement and enforce the PSD program and its implementing regulations to the Mojave Desert Air Quality Management District ("MDAQMD"), and neither the State of California nor MDAQMD have their own approved PSD programs for the area under MDAQMD's jurisdiction, including San Bernadino County. Therefore, EPA is the permitting authority for this area.

²The PSD regulations were modified on December 31, 2002 as part of a larger revision to the New Source Review program (67 Fed. Reg. 80186). All references in this NOV refer to the pre-existing PSD regulations, as those were the effective regulations at all times relevant to this NOV.

- 8. 40 C.F.R. § 52.21(b)(1)(i)(a) defines a "major stationary source" as any stationary source within one of 28 source categories which emits, or has the potential to emit, 100 tons per year or more of any air pollutant subject to regulation under the Act. Portland cement plants are included among the 28 source categories.
- 9. The PSD regulations define a "major modification" as "any physical change in or change in the method of operation of a major stationary source that would result in a significant net emissions increase of any pollutant subject to regulation under the Act." 40 C.F.R. § 52.21(b)(2)(i).
- 10. 40 C.F.R. § 52.21(b)(3)(i) defines "net emissions increase" as the "amount by which the sum of the following exceeds zero:
 - (a) Any increase in actual emissions from a particular physical change or change in method of operation at a stationary source; and
 - (b) Any other increases and decreases in actual emissions at the source that are contemporaneous with the particular change and are otherwise creditable."
- 11. 40 C.F.R. § 52.21(b)(21) defines "actual emissions" as follows: "In general, actual emissions as of a particular date shall equal the average rate, in tons per year, at which the unit actually emitted the pollutant during a two-

year period which precedes the particular date and which is representative of normal source operation." 40 C.F.R. § 52.21(b)(21)(ii). The PSD regulations also provide that "[f]or any emissions unit . . . which has not begun normal operations on the particular date, actual emissions shall equal the potential to emit on that date." 40 C.F.R. § 52.21(b)(21)(iv).

- 12. 40 C.F.R. § 52.21(b)(4) defines "potential to emit" as the "maximum capacity of a stationary source to emit a pollutant under its physical or operational limitation on the capacity of the source to emit a pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, shall be treated as part of its design if the limitation or the effect it would have on emissions is federally enforceable."
- 13. 40 C.F.R. § 52.21(b)(23)(i) defines "significant" and states that, in reference to nitrogen oxides ("NOx"), SO2 and CO, significant net emissions increase means an emissions rate that would equal or exceed 40 tons or more per year of NOx, 40 tons or more per year of SO2 and 100 tons or more per year of CO.
- 14. An applicant for a PSD permit to modify a stationary source is required to submit all information necessary to allow the

- permitting authority to perform any analysis or make any determination required in order to issue the appropriate permit. 40 C.F.R. § 52.21(n).
- 15. Commencement of actual construction of a major modification is prohibited without a permit which states that the modification would meet the requirements of 40 C.F.R. §§ 52.21(j) through (r). 40 C.F.R. § 52.21(i).
- 16. The PSD permitting process requires, among other things, for pollutants emitted in significant amounts the application of BACT to control emissions, 40 C.F.R. § 52.21(j); air quality modeling by the source, 40 C.F.R. § 52.21(l); and a detailed impact analysis regarding both the NAAQS and allowable increments, 40 C.F.R. § 52.21(k).
- 17. Any owner or operator of a source or modification subject to 40 C.F.R. § 52.21 who commences construction after the effective date of the PSD regulations without applying for and receiving a PSD permit shall be subject to appropriate enforcement action. 40 C.F.R. § 52.21(r)(1).

FINDINGS OF FACTS

18. Cemex is the owner and operator of the Facility. The Facility is a single facility for permitting purposes but is divided into a River Plant located in Victorville, California and a Quarry Plant located in Apple Valley, California. The River Plant is located about 15 miles from

- the Quarry Plant, and material is transferred by a train system that is under common ownership.
- 19. The Quarry Plant is a dry process plant that produces clinker from raw material extracted from the adjacent quarry, and it was initially constructed in 1965. This plant currently consists of pre-heater cement kiln and clinker cooler system Q2 (Permit# B001083), and pre-heater cement kiln and clinker cooler system Q3 (Permit# B005362) and several other emission units utilized to produce portland cement.
- 20. The River Plant is where the actual portland cement is manufactured, and it receives raw materials and clinker from the Quarry Plant. It began operations in 1915.
- 21. The Facility has undergone periodic enlargements since it was initially constructed.
- 22. At all times pertinent to this NOV, Cemex was a limited liability company organized in the state of Delaware and therefore a "person" as that term is defined in Section 302(e) of the Act, 42 U.S.C. § 7602(e).

1997 Modification

23. Commencing in mid-1997, Cemex upgraded numerous components of the Facility's Kiln Q2 with the stated goal to increase production by at least 25% ("1997 Modification"). <u>See</u> <u>Southdown's Victorville 97 Plant Expansion</u>, report by Geoffrey H. Conroy presented to IEEE (1999).

- 24. The 1997 Modification included the following:
 - A. All four stages of the preheater/precalciner were replaced with larger units;
 - B. A post combustion swirl chamber was added to the preheater;
 - C. A vortex drop-out chamber was added to the tertiary air duct;
 - D. The kiln drive gear reducer and DC drive system were upgraded to meet the increased speed and loading;
 - E. A six row static grate section and a beam aerated first grate were added to the Humboldt Clinker Cooler;
 - F. The entire firing system was upgraded from direct fired to an indirect firing system; and
 - G. An induced-draft ("ID") fan was added on top of the preheater.
- 25. As part of the 1997 Modification, Cemex also made upgrades to its finish grinding mill at the Quarry Plant, including a new roller press circuit with a new Humboldt Wedag Vseparator and deaglomerator and the addition of other associated items.
- 26. Cemex began operating the upgraded Facility in late 1997 after the 1997 Modification was completed.
- 27. The 1997 Modification was a physical change to the Facility

pursuant to 40 C.F.R. § 52.21(b)(2)(i).

- 28. As a result of the 1997 Modification, Cemex was able to increase its production of clinker from approximately 1.5 million tons per year to approximately 2.0 million tons per year.
- 29. The cost of the 1997 Modification was approximately \$32,000,000.
- 30. For 1996 and 1997, the Facility had the following average annual actual emissions in tons:
 - 1. NOx 4,136
 - 2. SO2 723
 - 3. CO 4,267
- 31. After the 1997 Modification, based on daily production rate (in tons) and emission rates (in pounds of pollutant per ton of clinker) that are representative of normal upper-end operations, and assuming operation 365 days a year, the Facility had the following potential to emit ("PTE") for the combined Kilns Q1 and Q2 for each identified criteria air pollutant in tons:
 - 1. NOx 6,805
 - 2. SO2 999
 - 3. CO 5,798
- 32. Based on the above annual emissions, the net emissions increase from the 1997 Modification for each of the

pollutants in tons per year is as follows:

- 1. NOx 2,669
- 2. SO2 276
- 3. CO 1,531
- 33. The 1997 Modification caused a significant net emission increase of NOx and SO2 greater than 40 tons per year and a significant net emission increase of CO greater than 100 tons per year.

2001 Modification

- 34. Commencing in 2000, Cemex once again physically modified its Facility ("2001 Modification").
- 35. As part of the 2001 Modification, Kilns Q1, R8 and R9 were completely shut down. Additionally, Cemex added a new finish cement grinding mill, storing/shipping equipment, control equipment (baghouses).
- 36. Also as part of the 2001 Modification, Cemex constructed a new Kiln Q3 south of the existing Kiln Q2 at the Facility.

 Kiln Q3 is a single-string, 5 stage pre-heater type with a pre-calciner, rotary kiln and clinker cooler. Ancillary equipment includes new dust collectors (baghouses), which serve covered conveyors, the kiln/cooler exhaust, coal unloading/stacker reclaimer equipment and storage areas, and electrical, water, instrumentation and monitoring systems to regulate the flow of materials and collect emissions data.

Additionally, a new roll press in the raw grinding loop was added along with control equipment. Kiln Q3 has a nominal capacity of 5,000 tons/day of clinker production, although it has demonstrated an actual production capacity of at least 6,000 tons/day.

- 37. Cemex began operating the upgraded Facility in November 2001 after the 2001 Modification was complete.
- 38. The 2001 Modification was a physical change to the Facility pursuant to 40 C.F.R. § 52.21(b)(2)(i).
- 39. As a result of the 2001 Modification, Cemex was able to increase its production of clinker from approximately 2.0 million tons per year to approximately 2.9 million tons per year.
- 40. The cost of the 2001 Modification was approximately \$190,000,000.
- 41. For 1999 and 2000, the Facility had the following average annual actual emissions in tons:
 - 1. NOx 4,986
 - 2. CO 3,489
- 42. After the 2001 Modification, based on daily production rate

 (in tons) and emission rates (in pounds of pollutant per ton

 of clinker) that are representative of normal upper-end

 operations, and assuming operation 365 days a year, the

 Facility had the following PTE for the combined Kilns Q2 and

Q3 for each identified criteria air pollutant in tons:

- 1. NOx 7,035
- 2. CO 5,165
- 43. Based on the above annual emissions, the net emissions increase from the 2001 Modification for each of the pollutants in tons per year is as follows:
 - 1. NOx 2,049
 - 2. CO 1,676
- 44. The 2001 Modification caused a significant net emission increase of NOx greater than 40 tons per year and a significant net emission increase of CO greater than 100 tons per year.

General Findings

- 45. The Facility meets the definition of "major stationary source" in 40 C.F.R. § 52.21 (b)(1)(i)(a), because it is a portland cement plant and it has the potential to emit in excess of 100 tons of NOx, SO2 and CO per year.
- 46. Cemex's Facility is subject to the PSD regulations and the requirements to obtain, prior to any major modification, PSD permits with appropriate permit conditions such as BACT emissions limits, as required by the CAA.

FINDINGS OF VIOLATION

47. Cemex failed to obtain a PSD permit or undergo PSD review, including applying BACT, prior to beginning actual

- construction of either the 1997 Modification or 2001 Modification, in violation of 40 C.F.R. Part 52.
- 48. Cemex has also continued to illegally operate the Facility despite its failure to have obtained a PSD permit prior to the 1997 Modification or 2001 Modification, in violation of 40 C.F.R. Part 52.
- 49. The violations noted in paragraphs 47 and 48 exist from at least the date of start of construction of the physical changes associated with the 1997 Modification and 2001 Modification and will continue until the appropriate permits are obtained and the necessary pollution controls are installed and operated.

NOTICE OF VIOLATION

Notice is hereby given to Cemex that the Administrator of the EPA, by authority duly delegated to the undersigned, finds that Cemex is in violation of federal PSD requirements as set forth in this NOV. EPA reserves the right to amend this NOV or issue a new NOV based on additional information obtained through Section 114 of the Act or any other source available to the Administrator at any point.

ENFORCEMENT

Section 113(a)(1) of the Act provides that at any time after the expiration of 30 days following the date of the issuance of this NOV, the Administrator may, without regard to the period of

violation, issue an order requiring compliance with the requirements of the SIP, issue an administrative penalty order, or bring a civil action pursuant to Section 113(b) for injunctive relief and/or civil penalties of not more than \$32,500 per day.

42 U.S.C. § 7413(a)(1); 40 C.F.R. Part 19.

Furthermore, if any person knowingly violates any federal regulation or permit requirement more than 30 days after the date of issuance of this NOV, Section 113(c) of the Act provides for criminal penalties, imprisonment or both.

Under Section 306 of the Act, the regulations promulgated thereunder, 40 C.F.R. Part 32, and Executive Order 11738, facilities to be utilized in federal contracts, grants and loans must be in full compliance with the Act and all regulations promulgated pursuant to it. Violations of the Act may result in the facility being declared ineligible for participation in any federal contract, grant, or loan.

PENALTY ASSESSMENT CRITERIA

Section 113(e)(1) of the Act states that the Administrator or the court shall determine the amount of a penalty to be assessed by taking into consideration such factors as justice may require, including the size of the business, the economic impact of the penalty on the business, the violator's full compliance history and good faith efforts to comply, the duration of the violation as established by any credible evidence (including

evidence other than the applicable test method), payment by the violator of penalties previously assessed for the same violations, the economic benefit of noncompliance, and the seriousness of the violation.

Section 113(e)(2) of the Act allows the court to assess a penalty for each day of violation. For purposes of determining the number of days of violation, where the EPA makes a prima facie showing that the conduct or events giving rise to this violation are likely to have continued or recurred past the date of the NOV, the days of violation shall be presumed to include the date of the NOV and each and every day thereafter until Cemex establishes that continuous compliance has been achieved, except to the extent that Cemex can prove by the preponderance of the evidence that there were intervening days during which no violation occurred or that the violation was not continuing in nature.

OPPORTUNITY FOR CONFERENCE

Cemex may, upon request, confer with EPA. The conference will enable Cemex to present evidence bearing on the findings of violation, on the nature of violation, and on any efforts it may have taken or proposes to take to achieve compliance. If such conference is held, Cemex may be represented by counsel. A request for a conference must be made within 10 working days of receipt of this NOV, and the request for a conference or other

inquiries concerning the NOV should be made in writing to:

Ivan Lieben Office of Regional Counsel U.S. EPA (ORC-3) 75 Hawthorne Street San Francisco, CA 94105 (415) 972-3914

Dated: _ 9-26-05

Deborah Jordan

Director, Air Division, Region 9